

REMARKS

Applicant has amended the claim 8 and canceled the claims 14, 15 and 19 without prejudice. Applicant respectfully submits that these amendments to the claims are supported by the application as originally filed and do not contain any new matter. Accordingly, the Office Action will be discussed in terms of the claims as amended.

The Examiner has rejected the claims 8, 9, 13 through 15 and 19 under 35 USC 112, second paragraph as being indefinite. In view of the above amendments, Applicant respectfully submits that the claims 8, 9 and 13 comply with the requirements of 35 USC 112, second paragraph.

The Examiner has rejected the claims 14, 15 and 19 as being substantial duplicates of claims 8, 9 and 13. Applicant has canceled the claims 14, 15 and 19 without prejudice.

The Examiner has rejected the claims 1 through 19 under 35 USC 102 as being anticipated by Kawagishi et al. stating that Kawagishi et al. discloses a three dimensional ultrasonic apparatus including a cardiac cavity detecting portion 8 comprising processors for executing a predetermined cardiac activity detection algorithm and detects data concerning the cardiac activity of the left ventricle of the heart based on the three dimensional spatial distribution data from the echo or Doppler processor by way of these processors and the apparatus also includes extracting data of cardiac endocardium M1 of the left ventricle LV corresponding to the boundary position of the cardiac cavity LV of the left ventricle from 3D morphological information and a basis axis setter is used for setting a basis axis along AX in the target tissue based on the shape of the target tissue as shown in Figure 10 and a reference cross axis setter sets a plurality of referenced cross sections each having different rotational angles from each other with the basis axis AX as the axis of rotation.

In reply to this rejection, Applicant has carefully reviewed Kawagishi et al. and respectfully submits that Kawagishi et al. does not specifically teach, show or suggest a specific means for setting the left ventricle major axis nor a specific means for setting the basis cross section. In contrast thereto, in Applicant's invention as claimed are included the specific features of, for example:

1. A basis cross section selector for selecting a basis cross section from among a plurality of referenced cross sections based on the cross sectional area of the target tissue (see claim 1);

2. A major axis setter for setting a left ventricle major axis such that the left ventricle major axis passes a center of mass of the left ventricle cavity based on a shape of the left ventricle cavity (see claim 8); and

3. A cross sectional image former for setting a four cavity cross section, a two cavity cross section and a minor axis cross section, which are all related to a heart (see claim 8).

Applicant respectfully submits that with the above features and means, Applicant's invention has advantages over Kawagishi et al., in that with Applicant's invention an optimal cross section can be set with respect to a target tissue (the heart) and an optimal image be obtained.

Still further, Applicant respectfully submits that Figure 10 and the description associated therewith does not disclose setting a basis axis in the target tissue based on a shape of the target tissue. Applicant respectfully submits that Figure 10 merely discloses dividing the left ventricle (LV) in half to reduce the difficulty in diagnosis myocardial ischemia (see column 7, line 62 through column 8, line 15). Still further, Applicant respectfully submits that the division plane PL is merely the plane along which the left ventricle is divided and this plane can be rotated so as to change which halves of the left ventricle are being looked at. Still further, Applicant respectfully submits that in Kawagishi et al. the Doppler processor 7 measures the time variation of a phase of the received signals from the receiver delay circuit 5 to thereby generate three dimensional spatial distribution image data on at least one of velocity, power and dispersion indicative of blood flow information of the subjects heart and this three dimensional spatial distribution image data is transmitted to the cardiac cavity detecting portion 8. The cardiac cavity detection portion 8 utilizes an algorithm and detects data concerning the cardiac cavity of the left ventricle based on the three dimensional spatial distribution data which is the velocity, power, and dispersion of blood flow. Accordingly, Applicant respectfully submits that there is no basis cross section selector which makes a selection of the basis cross section from among the plurality of reference cross sections based

MAR 02 2009

on a size of the cross section and instead makes the selection based upon velocity, power and dispersion of the blood flow information.

In view of the above, therefore, Applicant respectfully submits that Kawagishi et al. does not disclose each and every element of Applicant's invention as claimed and the claims 1 through 9 and 13 are not anticipated by Kawagishi et al.

In view of the above, therefore, it is respectfully requested that this Amendment be entered, favorably considered and the case passed to issue.

Please charge any additional costs incurred by or in order to implement this Amendment or required by any requests for extensions of time to QUINN EMANUEL DEPOSIT ACCOUNT NO. 50-4367.

Respectfully submitted,

By: 

H. Henry Koda
Reg. No. 27,729

Quinn Emanuel Urquhart Oliver & Hedges, LLP
Koda/Androlia
865 S. Figueroa Street, 10th Floor
Los Angeles, CA 90017
Telephone: 213-443-3085
Facsimile: 213-443-3100
E-mail: thomasedison@quinnemanuel.com

Certificate of Transmission

I hereby certify that this correspondence is being
facsimile transmitted to the Patent and Trademark Office
Fax No. (571) 273-8300 on March 2, 2009.

H. Henry Koda
Name


Signature

3/2/2009
Date